

WHAT IS CLAIMED IS:

82.17
1. A method for classifying a remote procedure call from a client system that initiates connections to a remote server using a client and underlying remote procedure call

5 transport code, the method comprising:

detecting when a connection carrying high value data for the remote procedure call is created;

using a side channel to communicate flow information associated with the detected connection to a classifying router; and

10 incorporating this flow information into the differentiated services classification subsystem of the classifying router.

2. The method of claim 1, wherein detecting comprises:

providing an API to calling applications;

15 detecting when applications call the API; and

executing a remote procedure routine based on a call by an application.

3. The method of claim 2, wherein:

executing comprises accessing a remote procedure call API; and

20 the API provided to calling applications includes functionality duplicative of remote procedure call API functionality.

4. The method of claim 2, wherein:

executing comprises accessing a remote procedure call API; and

the API provided to calling applications presents an interface duplicative of the remote procedure call API to calling applications.

5. The method of claim 2, further comprising:

obtaining flow information from an application call to the API; and

providing the flow information to the classifying router via the side channel.

6. The method of claim 5, wherein the flow information includes a five-tuple including sender and receiver MAC and IP addresses, sender and receiver MAC and IP port numbers, and TCP protocol type for the connection.

7. The method of claim 1, wherein the side channel is implemented as a CGI script from the client to the router.

8. The method of claim 1, wherein the flow information includes a five-tuple including sender and receiver MAC and IP addresses, sender and receiver MAC and IP port numbers, and TCP protocol type for the connection.

9. The method of claim 1, wherein incorporating includes:

using the flow information to determine a differentiated services classification for the connection; and
marking traffic delivered to the connection by the classifying router based on the classification.

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10. The method of claim 1, further comprising:

detecting the identity of the client making the remote procedure call, the flow information further containing this detected identity.

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11. An apparatus for classifying a remote procedure call from a client system that initiates connections to a remote server using a client and underlying remote procedure call transport code, the apparatus comprising:

a module configured to detect when a connection carrying high value data for the remote procedure call is created;

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a module configured to use a side channel to communicate flow information associated with the detected connection to a classifying router; and

a module configured to incorporate this flow information into the differentiated services classification subsystem of the classifying router.

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12. The apparatus of claim 11, wherein the detecting module is further configured to:

provide an API to calling applications;

detect when applications call the API; and
execute a remote procedure routine based on a call by an application.

13. The apparatus of claim 12, wherein:

5 the detecting module is further configured to access a remote procedure call API;

and

the API provided to calling applications includes functionality duplicative of
remote procedure call API functionality.

10 14. The apparatus of claim 12, wherein:

the detecting module is further configured to access a remote procedure call API;

and

the API provided to calling applications presents an interface duplicative of the
remote procedure call API to calling applications.

15 15. The apparatus of claim 12, wherein the side channel module is further
configured to:

obtain flow information from an application call to the API; and

provide the flow information to the classifying router via the side channel.

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16. The apparatus of claim 15, wherein the flow information includes a five-tuple including sender and receiver MAC and IP addresses, sender and receiver MAC and IP port numbers, and TCP protocol type for the connection.

5 17. The apparatus of claim 11, wherein the side channel is implemented as a CGI script from the client to the router.

18. The apparatus of claim 11, wherein the flow information includes a five-tuple including sender and receiver MAC and IP addresses, sender and receiver MAC and IP port
10 numbers, and TCP protocol type for the connection.

19. The apparatus of claim 11, wherein the incorporating module is further configured to:
use the flow information to determine a differentiated services classification for
15 the connection; and
mark traffic delivered to the connection by the classifying router based on the classification.

20 20. The apparatus of claim 11, wherein the side channel module is further configured to detect the identity of the client making the remote procedure call, the flow information further containing this detected identity.